NPL CANDIDATE

Update #

Received: JUL 15 1987

Facility name: Great Lakes Carbon Corp.

Location: 5700 Niagara Falls Blvd., Niagara Falls, New York

EPA Region: II

Persons(s) in charge of the facility: Mr. Michael Reele

Name of Reviewer: Joseph J. Mayo **Date:** 10/23/85

General description of the facility:
(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; type of information needed for rating; agency action, etc.)

Great Lakes Carbon Corp. is a 35 acre graphite manufacturing facility located in Niagara Falls, New York. From 1939 to 1966 Great Lakes Carbon used a 7 acre landfill to dispose of plant wastes which included: carbon particles, grapahite, coal dust, sand, block graphite and construction rubble. Major concern is for contamination of the underlying aquifer and small stream which drains the property and discharges to the Niagara River.

Score: S_M = 41.08 (S_{gw} = 4.90 S_{sw} = 70.90 S_a = 0)

SFE = 11.25

S_{DC} = 0

HRS COVER SHEET

Ground Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0	45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.						
2 Route Characteristics						3.2
Depth to Aquifer of Concern	0 1 2 (3)		2		6	6
Net Precipitation	0 1 (2) 3		1		3	2
Permeability of the Unsaturated Zone	0 1 (2) 3		1		3	
Physical State	0 1 (2) 3		1		3	2
Total Route Characteristics Score				12	15	
3 Containment	0 1 2 (3)		1	3	3	3.3
4 Waste Characteristics						3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)		1		18	18
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)		1		8	8
Total Waste Characteristics Score				26	26	
5 Targets						3.5
Ground Water Use	0 (1) 2 3		3		9	3
Distance to Nearest Well/Population Served	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40		1		40	0
Total Targets Score				3	49	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				3708	57,330	
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} =	4.90		

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 (45)	1	45	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	C	3	
1-yr. 24-hr. Rainfall	0 1 2 3	1		3	
Distance to Nearest Surface Water	0 1 2 3	2		6	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1		8	
Total Waste Characteristics Score			26	26	
5 Targets					4.5
Surface Water Use	0 1 2 (3)	3		9	
Distance to a Sensitive Environment	(0) 1 2 3	2		6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 / 12 16 18 20 / 24 (30) 32 35 40	1		40	
Total Targets Score			39	55	
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5			45 60	64,350	
7 Divide line 6 by 64,350 and multiply by 100		S_{SW} =	70.90		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	(0)	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100		S_a = (0)			

FIGURE 9
AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	4.90	24.01
Surface Water Route Score (S_{sw})	70.90	5026.81
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		5050.82
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		71.07
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		41.08

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Fire and Explosion Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Containment	(1) 3	1	1	3	7.1
2 Waste Characteristics					7.2
Direct Evidence	(0) 3	1		3	
Ignitability	0 (1) 2 3	1		3	
Reactivity	(0) 1 2 3	1		3	
Incompatibility	(0) 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1		8	
Total Waste Characteristics Score			9	20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 (3) 4 5	1		5	
Distance to Nearest Building	0 1 (2) 3	1		3	
Distance to Sensitive Environment	(0) 1 2 3	1		3	
Land Use	0 1 2 (3)	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 (5)	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 (5)	1		5	
Total Targets Score			18	24	
4 Multiply 1 x 2 x 3			162	1,440	
5 Divide line 4 by 1,440 and multiply by 100		SFE =	11.25		

1
C-1088
3
2
0
3
5
5
5

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)	
1 Observed Incident	(0) 45	1	0	45	8.1	0
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2						
2 Accessibility	(0) 1 2 3	1	0	3	8.2	0
3 Containment	0 (15)	1	15	15	8.3	15
4 Waste Characteristics Toxicity	0 1 2 3	5	3	15	8.4	15
5 Targets					8.5	16
Population Within a 1-Mile Radius	0 1 2 3 (4) 5	4		20		0
Distance to a Critical Habitat	(0) 1 2 3	4		12		
Total Targets Score			16	32		
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	21,600		
7 Divide line 6 by 21,600 and multiply by 100		S_{DC} =	0			

FIGURE 12
DIRECT CONTACT WORK SHEET

FIT QUALITY ASSURANCE TEAM

DOCUMENTATION RECORDS

FOR

HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Great Lakes Carbon Corporation

LOCATION: 5700 Niagara Falls Blvd., Niagara Falls, New York

DATE SCORED: 10/23/85

PERSON SCORING: Joseph Mayo

PRIMARY SOURCE(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.):
FIT Region II Files
FIT Region II Library

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

✓COMMENTS OR QUALIFICATIONS:
Air monitoring to detect the presence of specific air contaminants was not conducted at the site. Therefore, the air route of the MITRE model was scored a value of zero.

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

Concentrations of PAHs were detected in soil samples on and around the landfill. Since no groundwater samples were collected at the site, observed release is scored zero.

Ref: #13

Rationale for attributing the contaminants to the facility:

Concentrations of PAHs (polycyclic aromatic hydrocarbons) as high as 180,000 ug/kg were detected in soil samples on and around the landfill.

Ref: #13

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Site is located on the Lockport Dolomite Aquifer which consists of 5 lithographic types.

1) Brown-gray, coarse to medium grain dolomite
2) Gray-dark gray fine grained dolomite
3) Tannish-gray fine grained dolomite
4) Light-gray, coarse-grained limestone with crinoid fragments.
5) Light gray shaly dolomite

Ref: #4

Depth(s) from the ground surface to the highest seasonal level of the saturated zone water table(s) of the aquifer of concern:

Wells at Reichold/Varcum, Niagara Falls, New York, indicated depth to groundwater at 3-8 feet.

Ref: #3, #8

Depth from the ground surface to the lowest point of waste disposal/storage:

Waste is deposited directly onto ground surface. FIT II augered to a depth of 8 inches to obtain soil samples. Soil samples at 8 inches showed contamination with PAHs.

Ref: #1

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

32 inches

Ref: #6

Mean annual lake or seasonal evaporation (list months for seasonal):

26 inches

Ref: #6

Net precipitation (subtract the above figures):

6 inches

Ref: #6

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Soil type in the unsaturated zone is canandaigua series. The canadaigua series consists of deep, poorly drained medium to moderately fine textured soils.

Ref: #3

Permeability associated with soil type:

Permeability is 10^{-4}-10^{-3} cm/sec

Ref: #3

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

Landfilled wastes are composed of carbon particles, graphite, coal dust, sand, carbon fines, block graphite and construction rubble.

Ref: #1, #9

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

The landfill is not lined or capped and there are no leachate or runoff collection systems.

Ref: #1

Method with highest score:

No liner. Score 3

Ref: #6

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

✓ Groundwater was not sampled however, soil samples on and around the landfill indicated the presence of the PAHs fluoranthene, pyrene, benzo(a)anthracene, chrysene and benzo(b)fluoranthene.

✓ **Compound with highest score:**

All above compounds score 18 on toxicity-persistence matrix.

Ref: #6

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

The total volume of waste deposited in the landfill is estimated to be 52.59 acre-ft.

✓ **Basis of estimating and/or computing waste quantity:**

Area of landfill = 7.47 acres

Average depth of landfill = 7 feet

Volume of waste = 7.47 acres x 7 feet = 52.29 acre-ft.

Area of landfill calculated from map provided by Great Lakes Carbon.

Depth of landill estimated from site inspection and preliminary assessment.

Ref: #1, #7, #10

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5 TARGETS

Groundwater Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Groundwater is used for industrial purposes.

Ref: #4

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

There is a deep well, estimated to be 125 feet deep, on the Olin Corporation property on Buffalo Avenue 1.7 miles from the site. The well water is used for industrial purposes.

Ref: #4, #12

Distance to above well or building:

1.7 miles

Ref: #2, #4

Population Served by Groundwater Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Groundwater is not used for potable water supplies. Population is served by surface water. The Olin Corporation, located 1.7 mi. from the site, utilizes a 125 ft. well for industrial purposes.

Ref: #12

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre).

None within a 3-mile radius.

Ref: #12, #2

Total population served by groundwater within a 3-mile radius:

None of the population within a 3-mile radius is served by groundwater.

Ref: #12

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

Fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)flouranthene were detected in sediment samples in the on-site stream.

Rationale for attributing the contaminants to the facility:

The compounds listed above were detected in the downsteam sediment sample. None of the above compounds wee detected in the upstream sediment sample at concentrations above the laboratory detection limits.

Ref: #13

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2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

0-2%

Ref: #1, #2

Name/description of nearest downslope surface water:

A small unnamed stream is located on the Great Lakes Carbon Corporation property. The stream discharges to the Niagara River at 61st Street.

Ref: #1

Average slope of terrain between facility and above-cited surface water body in percent:

0-3%

Ref: #2, #3

Is the facility located either totally or partially in surface water?

The facility is not located in surface water.

Ref: #1

Is the facility completely surrounded by areas of higher elevation?

The area around the facility is relatively flat and slopes gently (0-2%) toward the south. The CECOS Landfill lies directly north of the facility and is elevated 60 feet with respect to the site.

Ref: #1, #2

1-Year 24-Hour Rainfall in Inches

2.5 inches

Ref: #6

Distance to Nearest Downslope Surface Water

0 miles. There is a small onsite sream which discharges to the Niagara River.

Ref: #1, #9

Physical State of Waste

The landfilled wastes are composed of carbon particles, graphite, coal dust, sand, carbon fines, block graphite and construction rubble.

Ref: #1, #9

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3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

No liner 3.

Ref: #1

Method with highest score:

No liner 3.

Ref: #6

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

Fluoranthene	Benzo(a)anthracene
Pyrene	Chrysene
	Benzo(b)fluoranthene

Compound with highest score:

All compounds above score 18 on toxicity-persistence matrix.

Ref: #6

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

The total volume of waste deposited in the landfill is estimated to be 52.59 acre-ft.

Basis of estimating and/or computing waste quantity:

Area of landfill = 7.47 acres

Average depth of landfill = 7 feet

Volume of waste = 7.47 acres x 7 feet = 52.29 acre-ft.

Area of landfill calculated from map provided by Great Lakes Carbon.

Depth of landill estimated from site inspection and preliminary assessment.

Ref: #1, #7, #10

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5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

The Niagara River is used as a source of potable water for the city of Niagara Falls. The water supply intake is located 1.2 miles downstream of the point of discharge of the on-site stream to the Niagara River.

Ref: #2, #11

Is there tidal influence?

No

Ref: #2

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

None within 1 mile.

Ref: #2

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

None within 1 mile.

Ref: #2

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

None. The site is located in a highly industrial and commercial section of Niagara Falls.

Ref: #2, #12

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

The on-site stream discharges to the Niagara River at 61st Street which is located upstream of the 53rd Street water supply intake. The intake is used to supply potable water to 71,553 residents.

Ref: #5, #11

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

None

Total population served:

71,553

Ref: #5, #11

Name/description of nearest of above water bodies:

Water is drawn from the Niagara River at a point adjacent to 53rd Street, Niagara Falls, New York.

Ref: #11

Distance to above-cited intakes, measured in stream miles.

Distance from the on-site stream to the above intakes is 1.7 stream miles.

Ref: #3, #11

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

None. No analytical data were collected to document an air release.

Date and location of detection of contaminants

Not Applicable

Methods used to detect the contaminants:

Not Applicable

Rationale for attributing the contaminants to the site:

Not Applicable

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2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Not Applicable

Most incompatible pair of compounds:

Not Applicable

Toxicity

Most toxic compound:

Not Applicable

Hazardous Waste Quantity

Total quantity of hazardous waste:

The total volume of waste deposited in the landfill is estimated to be 52.29 acre-ft.

Basis of estimating and/or computing waste quantity:

Area of landfill = 7.47 acres

Average depth of landfill = 7 feet

Volume of waste = 7.47 acres x 7 feet = 52.29 acre-ft.

Area of landfill calculated from map provided by Great Lakes Carbon.

Depth of landill estimated from site inspection and preliminary assessment.

Ref: #1, #7, #10

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3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi	0 to 1 mi	0 to 1/2 mi	0 to 1/4 mi
90,200	34,261	467	0

Population information was gathered using the Graphical Exposure Modelling System (GEMS).

Ref: #5

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

None within 2 miles.

Ref: #2

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

None within 1 mile.

Ref: #2

Distance to critical habitat of an endangered species, if 1 mile or less:

None within 1 mile. The site is located in a highly industrial and densely populated area.

Ref: #1, #2

Land Use

Distance to commercial/industrial area, if 1 mile or less:

0 miles. Site is located in a highly industrialized area of Niagara Falls.

Ref: #1, #2

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

None within 2 miles.

Ref: #2

Distance to residential area, if 2 miles or less:

A residential area is located 1/4 mile from the site.

Ref: #1, #2

Distance to agricultural land in production within past 5 years, if 1 mile or less:

No agricultural land located within 1 mile of the site.

Ref: #2

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

No prime agricultural land within 2 miles of the site.

Ref: #2

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

No

Ref: #1, #2

FIRE AND EXPLOSION

1 CONTAINMENT

Hazardous substances present:

Flouranthene, pyrene, benzo(a)anthracne, chrysene, benzo(a)flouranthene were detected in soil samples on and around the landfill.

Type of containment, if applicable:

NFPA rating = 0

Ref: #6

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2 WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Not performed.

Ignitability

Compound used:

All compounds have equal ignitability.

NFPA level = 0

Ref: #6

Reactivity

Most reactive compound:

NFPA reactivity rating = 0. Score 0

Ref: #6

Incompatibility

Most incompatible pair of compounds:

No incompatible materials present - Score = 0.

Ref: #6

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Total volume of waste deposited in the landfill is estimated to be 52.29 acre-ft.

Basis of estimating and/or computing waste quantity:

Area of landfill = 7.47 acres

Average depth of landfill = 7 feet

Volume of waste = 7.47 acres x 7 feet = 52.29 acre-ft.

Area of landfill calculated from map provided by Great Lakes Carbon.

Depth of landill estimated from site inspection and preliminary assessment.

Ref: #1, #7, #10

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3 TARGETS

Distance to Nearest Population

100 feet to on-site working area.

Ref: #1, #10

Distance to Nearest Building

100 feet to on-site working area.

Ref: #1, #10

Distance to Sensitive Environment

Distance to wetlands:

None within 3 miles.

Ref: #2

Distance to critical habitat:

None within 3 miles.

Ref: #2

Land Use

Distance to commercial/industrial area, if 1 mile or less:

0 miles. Site is located in a commercial/industrial area.

Ref: #1, #2

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:
None within 2 miles.
Ref: #1, #2

Distance to residential area, if 2 miles or less:
0.25 miles
Ref: #2, #5

Distance to agricultural land in production within past 5 years, if 1 mile or less:
None within 1 mile.
Ref: #2

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:
None within 2 miles.
Ref: #2

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?
No
Ref: #1, #2

Population Within 2-Mile Radius
34,265
Ref: #5

Buildings Within 2-Mile Radius
13,485
Ref: #5

DIRECT CONTACT

1 OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No known incidents.

* * *

2 ACCESSIBILITY

Describe type of barrier(s):

The entire site is fenced and access is controlled by a security guard.

Ref: #1

* * *

3 CONTAINMENT

Type of containment, if applicable:

Unlined landfill with no cover.

Ref: #1

* * *

4 WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

Fluoranthene, pyrene, benzo(a)anthracne, chrysene, benzo(a)flouranthene were detected in soil samples on and around the landfill.

Ref: #12

Compound with highest score:

All compounds above score 18 on toxicity-persistence matrix.

Ref: #6

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5 TARGETS

Population Within One-Mile Radius

3,042

Ref: #5

Distance to Critical Habitat (of Endangered Species)

No known critical habitats.

BIBLIOGRAPHY OF INFORMATION SOURCES

HRS MODEL

	SOURCE	LOCATION
1.	Site Inspection of Great Lakes Carbon conducted on 6/14/85 by NUS Corporation, Region II FIT, Joseph Mayo, Project Manager.	NUS Corp. Region II Office
2.	USGS Topographical Maps - Lewiston, Larsonville, Tonawanda West, and Niagara Falls Quadrangle.	NUS Corp. Region II Office
3.	Soil Survey of Niagara County, New York, U.S. Department of Agriculture, October 1972.	NUS Corp. Region II Office
4.	Johnston, R.H., "Groundwater in the Niagara Falls Area, New York, with Emphasis on the Water Bearing Characteristics of the Bedrock", New York Dept. of Conservation Bulletin, GW-53, 1964.	NUS Corp. Region II Office
5.	GEMS - Graphical Exposure Modeling System, U.S. EPA, Office of Pesticides and Toxic Substances Exposure Evaluation Division, Task - 4, June 1984.	NUS Corp. Region II Office
6.	Uncontrolled Hazardous Waste Site Ranking System User's Manual, Mitre Corporation.	NUS Corp. Region II Office
7.	Preliminary Assessment provided by EPA, Attachment 1.	NUS Corp. Region II Office
8.	Site Inspection of Reichold/Varcum conducted on 6/15/85 by NUS Corp. Region II FIT, Gary Rojek, Project Manager.	NUS Corp. Region II Office
9.	Profile report, Niagara County Dept. of Health, November-December 1983.	NUS Corp. Region II Office
10.	Plot plant blueprint of Great Lakes Carbon provided by Michael Reele of Great Lakes Carbon Corp. 6/14/85.	NUS Corp. Region II Office
11.	Telephone conversation with R. Travis of the city of Niagara Water Department on 10/17/85.	NUS Corp. Region II Office
12.	Telephone conversation between Jay Crystall of NUS Corp. and Mike Hopkins of the Niagara Co. Health Dept. on 8/8/85.	NUS Corp. Region II Office
13.	U.S. EPA Contract Laboratory Program organic and inorganic data analysis sheets for case #4550/1726B.	NUS Corp. Region II Office

Great Lakes Carbon Corporation
NYD002118248

LE

Groundwater

Suspected Release or No Suspected Release
- no containment or lining on LF area allowing for easy migration to gw

Sampling

- none

Primary Targets

- none

Secondary Targets

- no gw used for drinking w/in 3 miles

Surface Water

Suspected Release or **No Suspected Release** – where? – were they above background?
- 8 PAH's detected in sediment samples
- Mg, Fe, Fluoranthene, phenol detected in sw samples where? > background

Sampling
- sw + sediment samples

Drinking Water Threat

Primary Target Population
- none

why uptake is not a primary target - explain?

Secondary Target Population
- 80,000 people served by intake off Niagara R. 2 miles downstream

Human Food Chain

Primary Fisheries
- Niagara R. – make note difficult perhaps to sample/and indicate attribution

Secondary Fisheries
- none

Environmental Threat

Primary Sensitive Environments
- none

Secondary Sensitive Environments
- none

Soil Exposure

Suspected Release or **No Suspected Release**

- LF has no containment or run-off, leachate containment system

Does data show any hits of contaminants?

Sampling

- 4 soil samples taken

Resident Population Threat

Resident Population or **Workers**

- 200 workers ~~on site~~ at site

Terrestrial Sensitive Environments

- none

Air

Suspected Release or No Suspected Release

- HNu + OVA detected no levels above ambient background levels

Sampling

- HNu + OVA monitoring

Primary Target Population

- none

Secondary Target Population

- pop. w/in 4 miles
- workers at facility (200)

Primary Sensitive Environment

- none

Secondary Sensitive Environment

- none